# NEW RECORDS OF MALESIAN PLANTS FROM GREAT NICOBAR ISLAND

A Joint Scientific Expedition to the Great Nicobar Island was organised by the Government of India in 1966 with the object of exploring the mineral and biological wealth of this remote island in the Bay of Bengal. Seven scientific departments of which Botanical Survey of India was one, participated in the above expedition. The botanical team was entrusted with the exploration of the plant wealth of the island.

Great Nicobar is the largest island of the southern group of Nicobars, lying between longitudes 93°37'E and 93°56'E and latitudes 6°45'N and 7°15'N. It is roughly 55 km long and 30 km wide and has an area of 865 sq. km. Two principal mountain ranges run more or less north to south and the highest point is Mount Thulier. Five perennial rivers (Galathea, Dogmar, Alexandra, Amrit Kaur and Jubilee) take their origin from these mountain ranges. The climate is tropical with heavy rainfall amounting to 300 cm per annum. The vegetation is divisible into 1. Mangrove forest, 2. Beach forest, 3. Low Evergreen forest, 4. High wet Evergreen forest and 5. Riverine vegetation. The forests are thickly populated with trees, climbers and shrubs with few herbaceous undergrowth in the forest floor.

A number of interesting and rare plants were collected from this island of which many have turned out to be new records for India. Plants which are strictly Malesian in character are treated in this paper. Such new records are described here with diagnostic characters and illustrations as it will aid in the further study on the Flora of India. The specimens are located in the Central National Herbarium, Botanical Survey of India, Howrah (CAL.).

### MENISPERMACEAE

**Tinomiscium petiolare** Miers, Ann. Mag. Nat. Hist. Ser. II. 7: 44. 1851; Hook. f. et Thoms. in Fl. Brit. Ind. 1: 97. 1872; Ridley, Fl. Mal. 1: 105. 1922; Baker et Bakhuizen van den Brink, Fl. Java 1: 157. 1963.

A strong woody climber; branches glabrous. *Leaves* alternate, ovate to ovate-oblong, 13.0-14.5 × 8.5-9.0 cm, long-petiolate, entire, obtuse to acute at apex, rounded at base, glabrous, coriaceous, palmately veined with 3-5 nerves; petiole 6.5-7.5 cm long, glabrous. *Infructescence* pendent, racemose. *Fruit* 1-seeded drupe, orange in colour, 2.4 × 1.7 cm, endocarp woody; seed with black mucilagenous coating.

*Specimen examined*: Galathea river bank, Great Nicobar Island, 27-3-1966—*Thothathri* and *Banerjee* 11538 (CAL).

*Distribution*: Malayan Peninsula, Sumatra, Borneo, Java (cultivated) and Tonkin.

As there is a good illustration of this species in Ridley's Flora (*l.c.*) it is not given here.

### STERCULIACEAE

**Sterculia macrophylla** Vent. Jard. Malm. 2: 91. 1802; Br. in Benn. Pl. Jav. Rar. 230. 1844; Mast in Hook. f. Fl. Brit. Ind. 1: 356. 1874; Ridley, Fl. Mal. 1: 268. 1922; Backer et Bakhuizen van den Brink, Fl. Java 1:412. 1963 (Fig. 1).

A medium-sized tree, 10-15 m tall. *Leaves* simple, ovate to obovate, very large, 20-30 × 20-25 cm, deeply cordate at base, obtusely acuminate at apex, entire, glabrous above, stellately tomentose beneath, palmately veined; petiole 10-15 cm long, sparingly stellately tomentose. *Flowers* absent. *Fruit* a follicle, 4 in a cluster, 3-5 × 2-4 cm, scarlet, minutely soft pubescent, 1-2 seeded; seed oval to rounded, black, 1.5-2.0 × 1-2 cm.

The tree is common along the river banks in Great Nicobar.

*Specimen examined*: Galathea river bank, Great Nicobar Island, 24-3-1966—*Thothathri* and *Banerjee* 11510 (CAL).

*Distribution*: Malayan Peninsula and Java.

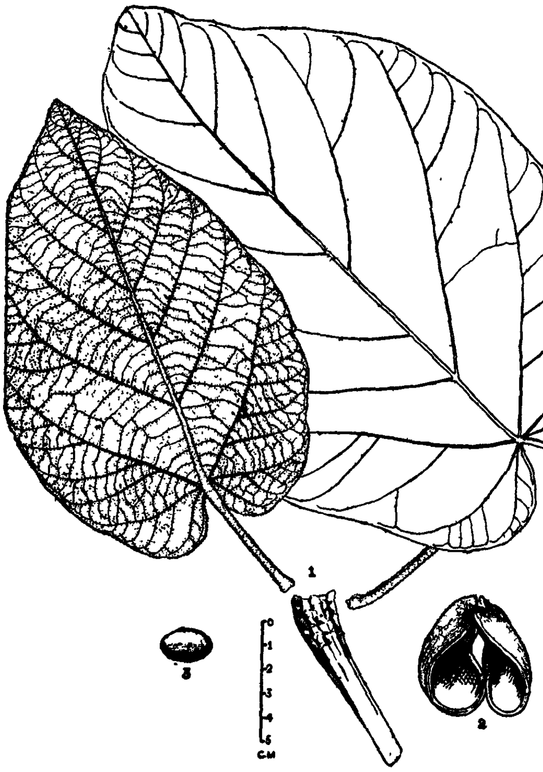

Fig. 1. *Sterculia macrophylla* Vent.
1. A branch with leaves. 2. Fruit. 3. Seed.

MELASTOMATACEAE

**Neodissochaeta celebica** (Bl.) Bakh. f. in Meded. Bot. Mus. Herb. Rijks. Univ. 91: 141. 1943. *Dissochaeta celebica* Bl. Mus. bot. 1: 36. 1849; Clarke in Hook. f. Fl. Brit. Ind. 2: 544. 1879; Ridley, Fl. Mal. 1: 798. 1922. (Fig. 2).

A shrubby tree with drooping branches, 5-6 m tall; brachlets, panicle, undersurface of leaves and petiole covered with brown stellate tomentum. *Leaves* opposite, oblong, 10-12 × 4.0-4.5 cm, entire, acuminate, rounded at base, subcoriaceous; blade 3-nerved from base besides 2 submarginal nerves; petiole 1.0-1.2 cm long. *Inflorescence* a terminal panicle, 10 × 6 cm, ultimate branches cymose. *Flowers* white, 8-10 mm long. *Calyx* campanulate, 3-4 mm long, stellately brown tomentose without, mouth faintly lobed. *Corolla* petals 4, white, 4-5 mm long. *Stamens* 4, unequal, 5.0-6.5 mm long; anthers clavate, connectives produced dorsally into a triangular appendage and ventrally into two linear appendages. *Ovary* 4-celled, style filiform, ovules many on axile placentum. *Fruit* subglobular, 3-5 mm long, purple.

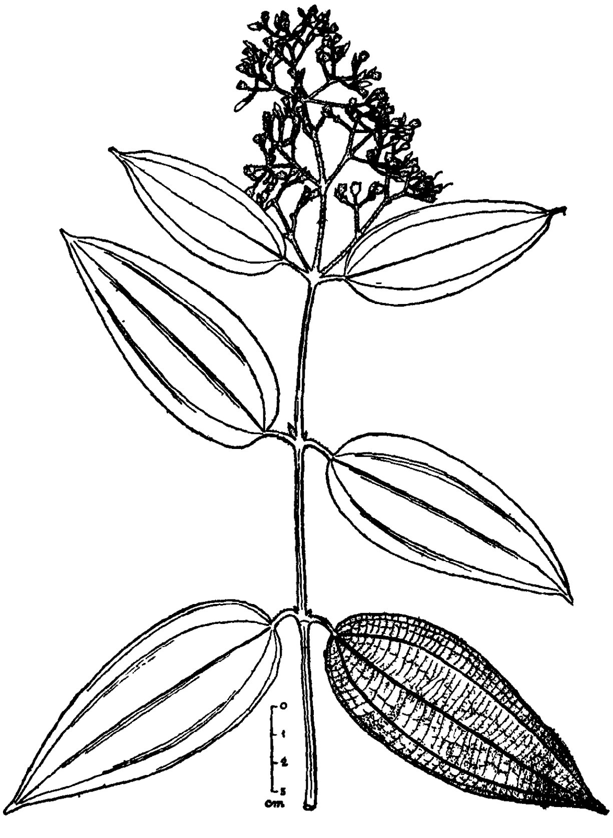

Fig. 2. *Neodissochaeta celebica* (Bl.) Bakh. f.

*Specimen examined*: Dogmar river, Great Nicobar Island, 8-4-1966—*Thothathri* and *Banerjee* 11587 (CAL).

*Distribution*: Malayan Peninsula, Borneo and Celebes.

RUBIACEAE

**Mussaenda villosa** Wall. ex Hook. f. Fl. Brit. Ind. 3: 91. 1880; Ridley, Fl. Mal. 2: 60. 1923. (Fig. 3).

A scandent shrub; branches hispid with spreading rufous hairs. *Leaves* opposite, ovate to elliptic, at times suborbicular, 13.5-

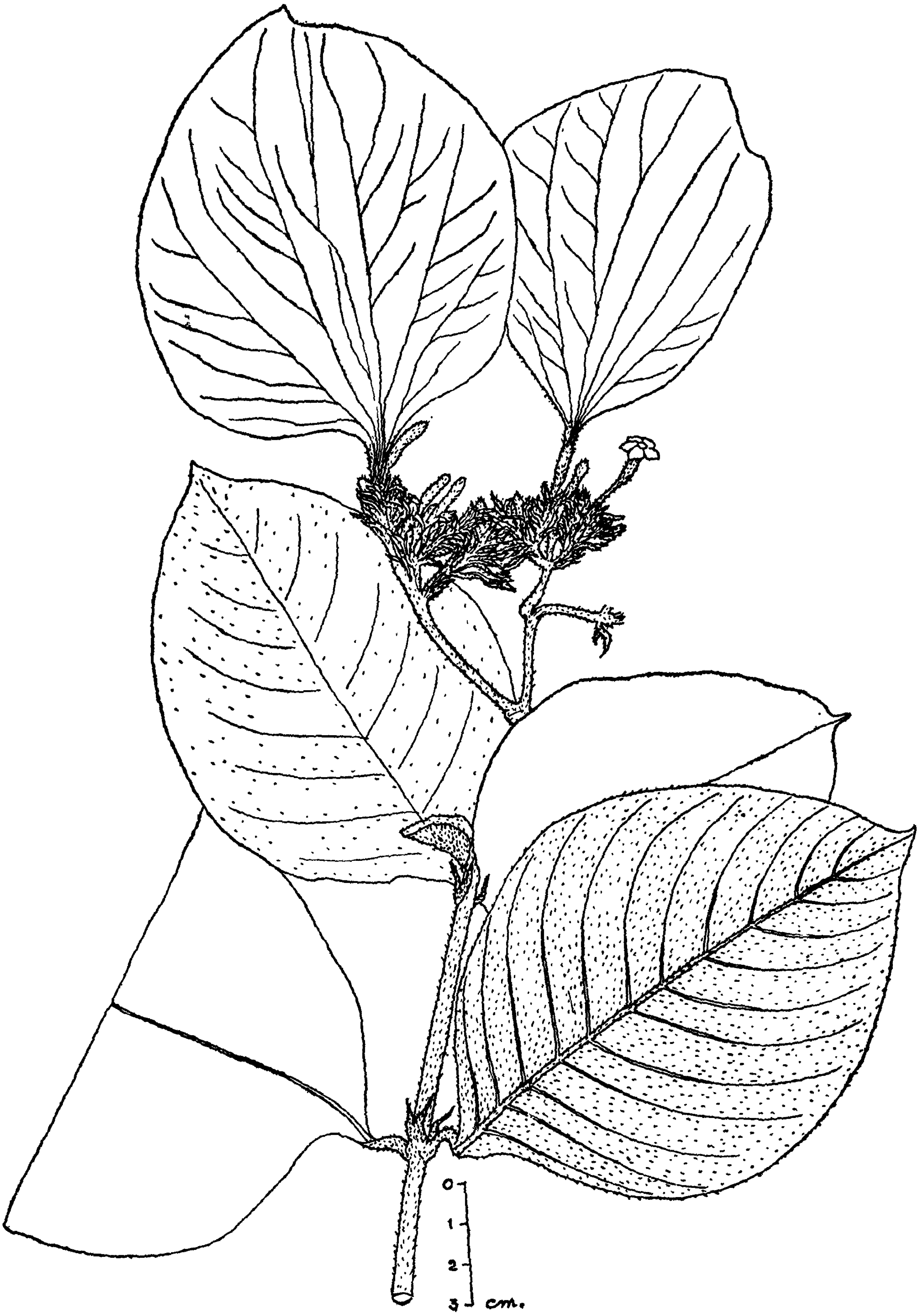

Fig. 3. *Mussaenda villosa* Wall. ex. Hook. f.

14.5 × 10-12 cm, stipulate, entire, rounded to truncate at base, densely hispid on the lower surface and sparsely hispid on the upper surface, lateral veins 12 pairs, distinct on the lower surface; petiole 1.0-1.5 cm long, hispidly hairy; stipule lanceolate. *Inflorescence* a terminal cyme, branched, 12 cm long, hispid, primary and secondary rachii trichotomously branching. *Flower* orange in colour, prominent due to one of the enlarged, leafy, yellow calyx teeth; bract linear, hirsute, 8-10 mm long; pedicel 3-4 mm long. *Calyx* tubular, 4-5 mm long, mouth divided into 5 teeth, leafy enlarged tooth ovate to rounded, acuminate, 10-12 × 7.0-9.5 cm, pubescent on nerves beneath. *Corolla* tubular with 5 spreading lobes at the top, 1.8-2.0 cm long, hispidly hairy without but throat villous with yellow hairs. *Stamens* 5, epipetalous, anthers linear. *Ovary* 2-celled, style filiform, stigma 2, linear, ovules many on fleshy axile placentum.

*Specimen examined*: Galathea river, Great Nicobar Island, 24-3-1966—*Thothathri* and and *Banerjee* 11491 (CAL).

*Distribution*: Malayan Peninsula, Borneo and Siam.

EUPHORBIACEAE

**Macaranga triloba** Muell.-Arg. in DC. Prod. 15(2): 989. 1866; Hook. f. Fl. Brit. Ind. 5: 452. 1887; Ridley, Fl. Mal. 3: 298. 1924; Merr. Enum. Philip. Fl. Pl. 2: 443. 1924; Backer et Bakhuizen van den Brink, Fl. Java 1: 488. 1963.

A shrubby tree, 4-5 m tall. *Leaves* large, 28-30 × 20-25 cm, cordate, stipulate, trilobed, peltate, margin glandular toothed, apex acuminate, coriaceous, glabrous above, puberulous below especially on nerves and nervules; lateral veins 10-12 pairs on the larger midlobe; petiole 15-24 cm long, puberulous; stipule ovate to cordate, 10 × 8 mm, revolute. *Male panicle* slender, 5-8 cm long, puberulous to pubescent, flowering bract cordate, acuminate. *Perianth* obcuneate, 0.8 mm long. *Stamen* 1, pedicel 0.3 mm long. *Female flowers* sessile, in axillary, capitate raceme, inflorescence rachis stout, 5-7 cm long. *Perianth* cup-shaped, 4-lobed, 1 mm long, tomentose at base. *Ovary* obconical, trilobed, styles connate, stigmas erect, ovule 1 in each cell. *Fruit* a capsule with prickles, 6-8 × 1.0-1.5 mm, seeds 4-5 mm in diameter.

*Specimens examined*: Campbell bay, 11-3-1966 (♂), Dogmar river, 8-4-1966 (♀), Great Nicobar Island—*Thothathri* and *Banerjee* 11440, 11595 (CAL).

*Distribution*: Malayan Peninsula, Java, Sumatra and Borneo.

There is a good illustration of this species in Ridley's Flora (l.c.).

ACKNOWLEDGEMENT

The authors are thankful to the Director, Botanical Survey of India for facilities.

K. THOTHATHRI, S. P. BANERJEE
*Botanical Survey of India, Howrah*
AND
P. K. HAJRA
*Botanical Survey of India, Shillong*

## REFERENCES

BACKER, C. A. AND R. C. BAKHUIZEN VAN DEN BRINK. *Flora of Java*. 1-2. 1963-65.

HOOKER, J. D. *The Flora of British India* 1-7. 1872-97.

KING, G. AND J. S. GAMBLE. Materials for the Flora of the Malay Peninsula. *J. Asiat. Soc. Beng.* 5 vols. 1889-1936.

KURZ, S. Descriptions of new plants from Nicobar Islands. *J. Bot.* (Lond.) 321-333. 1875.

——A sketch of the vegetation of the Nicobar Islands. *J. Asiat. Soc. Beng.* 45 : 105-164. 1876.

MERRILL, E. *A review of the identification of the species described in Blanco's Flora De Philippines*, 1905.

——*A Flora of Manila*, 1912.

——*An interpretation of Rumphius's Herbarium Amboinense*, 1917.

——*An enumeration of Philippine flowering plants*. 1-4. 1923-25.

PRAIN, D. On a botanical visit to Little Andaman and the Nicobars. *Proc. Asiat. Soc. Beng.* 156-175. 1891.

RIDLEY, H. N. *The Flora of the Malay Peninsula*. 1-5. 1922-25.

SAHNI, K. C. Botanical exploration in Great Nicobar Island. *Indian For.* 79 : 3-7. 1953.

THOTHATHRI, K. Botanical exploration in Car Nicobar and Nancoury Islands. *Bull. bot. Surv. India* 2 : 341-346. 1960.

——New records of plants from the Andaman and Nicobar Islands. *J. Bombay nat. Hist. Soc.* 58 : 310-317. 1961.